



# DATASHEET



## FEATURES

- ✓ Collimated Beam
- ✓ High Stability and Low Noise
- ✓ ESD & Reverse Polarity Protected
- ✓ Low Cost

## APPLICATIONS

- ✓ Measurement
- ✓ Automation
- ✓ Alignment

## Operational Hazard of Laser Module

This laser module emits radiation that is visible/invisible and harmful to human eye. When in use, do not look directly into the laser emitting aperture. Direct viewing of laser diode emission at close range may cause eye damage.



## Limited Warranty

One year. No warranty coverage for disassembly, modifications, or damage due to abuse or misapplication.



## SPECIFICATIONS

### OPTICAL

Wavelength	650 nm
Optical Output Power	<0.4 mW
Laser Power Stability (with heat sink)	< 1%
Wavelength Drift	0.2nm/°C
Laser Class	Class 1
Laser Operation	Continuous
Laser Structure	Single Mode Laser
Divergence (at collimation)	< 2 mrad
Spot Size	3mm elliptical

### ELECTRICAL

Operating Voltage	3 to 5V DC
Operating Current	< 40mA
Control Circuit	Auto Power Control
Electrical Connections	+ Red, - Black

### MECHANICAL

Dimension, mm	9mm (D)X 19mm (L)
Cable	380mm
Operating Temperature	+10°C to +40°C
Storage Temperature	-40°C to +80°C
Heat Sink Requirements	Recommended for extended use

**Notes:** This laser is designed to dissipate heat through its body. Do not use a thermally insulating material for mounting. Do not restrict air circulation around the device. An additional heat sink can be used to maximize the performance and life time.

## OUTLINE DRAWING

